Seismic Safety Commission Minutes of Meeting January 10, 2002 State Capitol, Room 444 Sacramento, California

Members Participating

Members Absent

Bruce R. Clark, Chairman Stan Y. Moy, Vice Chairman Andrew Adelman (arr. 9:20 a.m.) Mark Church

Mark Church William L. Gates Lawrence T. Klein Linden T. Nishinaga Ashok S. Patwardhan Daniel Shapiro Senator Richard Alarcon/Chris Modrzejewski Douglas E. Mochizuki

Staff Participating

Richard McCarthy Karen Cogan Robert Anderson Abby Browning Henry Reyes Henry Sepulveda Fred Turner Vince Vibat

I. CALL TO ORDER/ROLL CALL

The meeting of the Seismic Safety Commission was called to order by Chairman Bruce Clark at 9:02 a.m. Executive Assistant Karen Cogan called the roll and confirmed the quorum.

II. CHAIRMAN'S REMARKS

Chairman Clark proposed the following committee appointments:

- Planning & Budget: Commissioner Shapiro, chair; Commissioners Gates and Klein, members
- Legislative Advisory: Commissioner Gates, chair; Commissioners Adelman, Church, and Shapiro, members
- Strong Motion Instrumentation Advisory: Commissioner Patwardhan, chair; Commissioners Clark and Nishinaga, members
- Emergency Preparedness, Response, and Recovery: former Commissioner Donald Manning, chair; Commissioners Adelman and Moy, members
- Research Implementation: Commissioners Clark and Klein, members
- Hospital Building Safety Board representative: Commissioner Adelman

Chairman Clark noted that although there are a limited number of commissioners, the committees have a substantial amount of work to be done.

III. APPROVAL OF NOVEMBER 8, 2001 MEETING MINUTES

Referring to Page 2, first paragraph, next-to-last line, Commissioner Nishinaga recommended changing "annual report" to "periodic report."

ACTION: Commissioner Church made a motion, seconded by Commissioner Klein, that:

The Commission approve the minutes of the November 8 meeting as amended.

* Motion carried, 8 - 0 (Commissioner Adelman absent during voting).

IV. COMMITTEE REPORTS

There were no committee reports.

V. EXECUTIVE DIRECTOR'S REPORT

Budget Reduction Impacts

Mr. McCarthy invited Commissioner Gates and Mr. Sepulveda to discuss the status of the proposed state budget reductions on the Commission's budget.

Commissioner Gates drew attention to the December 31 budget status report, and cautioned that not all 2001 expenditures have been included. He noted the proposed budget reductions will require difficult adjustments, but the Commission is currently running at a small surplus.

Director of Legislation Henry Sepulveda explained that there were a series of budget adjustments during the last year that result in a \$63,000 reduction in the Commission's general fund budget, or a 6.5 percent cut. The Governor's proposed budget for 2002-2003 proposes another \$26,000 reduction, a 9 percent reduction for the Commission.

Mr. McCarthy said the staff will continue to update the Commission as the situation develops.

Status of California Earthquake Loss Reduction Plan Revision

Mr. McCarthy reported that the staff presented the latest revision of the *California Earthquake Loss Reduction Plan* to the Office of Emergency Services (OES) in early December. After reviewing the document, OES Director Dallas Jones took the document to the Governor's office, where it is currently awaiting his signature. Mr. McCarthy added that the staff would be following up with the Governor's Office the following day.

Initiative Progress Report

Mr. McCarthy drew attention to the draft initiative progress report in the meeting packet. He reported that the staff has completed review of about 60 percent of the 147 initiatives in the *Plan*.

He said the report shows the State of California has spent a substantial amount of money on seismic mitigation efforts since 1992. Mr. McCarthy noted the final report will distinguish between ongoing initiatives and those with definite completion times. He added that OES finds the proposed format acceptable, and he welcomed comments from commissioners.

Commissioner Shapiro recommended describing progress more definitively. He suggested using language more specific than "well along," for example.

March Workshop on Retrofit Cost

Mr. McCarthy noted there has been a long-standing need for concrete information about the costs and benefits of seismic mitigation, and a thorough cost-benefit analysis will be helpful in justifying bond funding and other legislative efforts. He suggested the Commission focus its attention on this topic at the February and March meetings.

Commissioner Patwardhan commented that cost-benefit information provides a sound basis for policy decisions. He suggested inviting a panel of experts to make presentations to the Commission and share their ideas. He volunteered to help the staff organize this agenda item.

Chairman Clark thanked Commissioner Patwardhan for his offer. There was general consensus supporting the idea of holding a workshop session at the March meeting focusing on cost-benefit analysis of seismic mitigation efforts. Commissioner Patwardhan suggested working with the ad hoc *Plan* revision committee to identify appropriate experts.

PEER Annual Meeting

Mr. Robert Anderson noted the PEER Center annual meeting is scheduled for January 17 and 18 at the Marriott Hotel in Oakland. He said the event is free, and he urged commissioners who have not made reservations to contact the staff if they wished to attend.

Mr. Anderson said the January 17 session will feature an overview of testing methodologies, following by a closed session, and presentations on January 18 will focus on performance-based earthquake engineering updates and new products.

Commissioner Patwardhan asked if the presentations will be summarized in a report. Mr. Anderson responded that PEER will produce a looseleaf binder. Commissioners requested copies, and Mr. Anderson said the staff will duplicate the materials for each commissioner.

Proposition 122 Outreach Presentations

Mr. McCarthy noted that using Proposition 122 products in road show presentations could help generate revenues for the Commission, especially important in the current climate of budget reductions. He invited Mr. Reyes to discuss those efforts.

Mr. Henry Reyes reported that the staff met with representatives from ATC and EQE, two

Proposition 122 contractors, to discuss using their end products to target specific audiences. He said the staff envisions developing a series of seminars for design professionals, building officials, risk managers, and others. Mr. Reyes said the staff and contractor representatives drafted a proposal for 21 seminars during the next twelve months, and OES is considering that proposal. He noted the plan calls for \$500,000 in seed money from Northridge hazard mitigation funds. He added the program could produce \$80,000 in revenues coming to the Seismic Safety Commission.

Mr. Reyes said he and Mr. McCarthy will be meeting with OES representatives to finalize the proposal, and he promised to keep the Commission informed.

Status of FEMA Appeal

Mr. McCarthy explained that as a result of the FEMA audit last fall, the Commission is appealing a decision disallowing approximately \$216,000 in commissioner time and \$33,000 in reproduction costs associated with the Northridge earthquake report. He said the Commission's position is that those contributions exceeded the \$110,000 match requirement, so no repayment is due even if they are disallowed; in fact, FEMA may owe the Commission an additional \$40,000. Mr. McCarthy added it seems clear from FEMA's own regulations that volunteer time counts toward matching funds.

Mr. McCarthy said the Commission appealed the audit decision in a timely manner and submitted a detailed response through OES. The appeal was accepted and the Commission is now awaiting a decision. Mr. McCarthy said he would keep the Commission informed. He noted the Planning and Budget Committee and the Legislative Advisory Committees discussed Approaching California's two senators if the appeal outcome is unsatisfactory.

Online Ethics Training

Mr. McCarthy reminded all commissioners to complete their mandatory ethics training and submit the required written verification to the Commission office. He noted the online training course takes approximately one hour.

VI. REVIEW COMMISSION-SPONSORED LEGISLATION FOR 2002

Mr. Sepulveda noted that due to state budget constraints, legislative ideas requiring new money are not likely to pass. With this in mind, the Commission's Legislative Advisory Committee reviewed and made recommendations regarding Commission-sponsored legislation and new proposals for introduction in January or February.

Commission-Sponsored Legislation

Mr. Sepulveda reviewed the status of five Commission-sponsored bills introduced in the last legislative session. He said the committee recommends dropping SB 629 (Alarcon), regarding storage racks, because the governor signed legislation on this issue last year. The committee also

recommends dropping SB 998 (Alarcon), requiring a statewide disaster recovery plan, because OES has voluntarily taken on that task.

Mr. Sepulveda said SB 717 (Speier), a \$600 million seismic retrofit bond bill, is still pending in the Assembly Appropriations Committee, and that bill has a chance of passing. He explained that SB 717 has two components: \$300 million for retrofit of local government buildings and essential services facilities, and \$300 million to residential retrofit. Mr. Sepulveda noted the housing retrofit component of this bill might be merged with Senator Burton's bond bill, so it might be advisable to revise SB 717 to incorporate \$200 million in funding to urban search and rescue (USAR) activities. He said the staff will work with Senator Speier regarding this amendment.

Mr. Sepulveda cautioned that new bond bills may encounter difficulty this year because the November 2002 ballot already includes a \$10 billion education bill and Senator Burton's bond bill.

Commissioner Patwardhan advocated incorporating funds for strong motion instrumentation within the retrofit bond bills. Chairman Clark agreed.

ACTION: Commissioner Moy made a motion, seconded by Commissioner Klein, that:

The Commission drop its sponsorship of SB 629 and SB 998 as recommended.

* Motion carried, 9 - 0.

ACTION: Commissioner Klein made a motion, seconded by Commissioner Shapiro, that:

The Commission direct the staff to work with the author of SB 717 to incorporate funding for USAR and strong motion instrumentation and to merge the residential retrofit component with Senator Burton's housing bond bill.

* Motion carried, 9 - 0.

Mr. Sepulveda noted AB 977 (Alquist), calling for replenishment of the Commission's earthquake investigations account, is still in the Senate Appropriations Committee, and the staff will continue to work for its passage.

Mr. Sepulveda said AB 724, regarding school preparedness, still lacks oversight and teeth. He noted the staff did an informal survey and determined that only 10 to 20 percent of school districts in California are currently in compliance with existing laws. The Legislative Advisory Committee proposes narrowing the bill, making compliance permissive, and using certification from the Seismic Safety Commission as an incentive. Districts that comply could then become eligible for incentive grants to use for federal matching funds. Mr. Sepulveda noted the committee also recommends that AB 724 include a provision for \$60,000 to fund an additional Commission staff position.

Commissioner Shapiro expressed reservations about allowing school districts to appraise their own performance. He added that this system of self-evaluation will be difficult to police. Mr. Sepulveda said Assemblywoman Corbett's staff members raised the same issue. He noted it may be possible to add preparedness inspections to annual fire inspections. Commissioner Shapiro pointed out that fire departments may resist expanding their duties. He recommended amending the bill to mandate compliance and require reasonable proof. Commissioner Klein suggested a post-event audit to verify compliance. Mr. Sepulveda said that after an event, affected schools would apply to the Seismic Safety Commission for incentive grants, and they would need to submit their plans as part of that process.

Chairman Clark asked if model plans are available. Mr. Sepulveda responded that OES has a well-developed school plan that incorporates SEMS, regular drills, and maintaining supplies. Commissioner Nishinaga inquired about the cost of participation in SEMS. Mr. Sepulveda answered that OES has a booklet identifying the necessary steps and supplies; he estimated the annual cost at about \$1,000.

ACTION: Commissioner Klein made a motion, seconded by Commissioner Nishinaga, that:

The Commission direct the staff to work with the author's staff to amend AB 724 as recommended.

* Motion carried, 9 - 0.

New Legislation

Commissioner Gates asked about the possibility of legislation requiring hospitals to post warnings on hazardous buildings. Mr. Sepulveda noted the Commission's report on SB 1953 last fall was well received in the Legislature. The Legislature asked the Commission to consider sponsoring legislation allowing a five-year extension of the 2008 compliance deadlines for hospitals willing to meet 2030 standards. Although the Commission supports this concept, the staff and committee agreed the Commission would not act as a sponsor. Mr. Sepulveda observed that posting would be a controversial issue.

Commissioner Shapiro pointed out that California has a law mandating placarding of unreinforced masonry buildings, but there is little compliance because of the lack of enforcement provisions. He noted posting may not be an effective way of protecting the public. Mr. McCarthy observed there were many SPC-1 buildings reported by hospitals that may be incorrectly categorized. Commissioner Gates added that buildings were automatically considered SPC-1's if their hospital owners did not respond to the survey.

Commissioner Gates pointed out that owners of hazardous buildings have a duty to disclose defects to members of the public, and a failure to do so could result in huge liability. Commissioner Klein asked about the chances of passing posting legislation in the current session. Commissioner Gates responded that the subject will produce a huge flurry of debate, but the eventual outcome might be passage of the bill. He added that it may be difficult to find an

author willing to take on such a controversial subject.

Chairman Clark said he was uncomfortable with the current breadth of the SPC-1 category. He recommended directing the staff to contact legislators to ascertain interest in authoring a posting bill. Mr. Sepulveda asked how the staff should proceed if a willing author is found, noting a decision might be necessary before the next Commission meeting. Commissioner Gates suggested that the staff then proceed to formulate a bill. Chairman Clark proposed authorizing the Legislative Advisory Committee to work with the staff to draft a proposed bill.

Commissioner Church expressed reservations about the effectiveness of posting. Commissioner Gates suggested using the staff's draft bill as a basis for Commission discussion at the February meeting. Commissioner Shapiro asked if deferring a decision on sponsorship would weaken the Commission's position with the Legislature if the bill is eventually introduced. Mr. Sepulveda said the Commission could ask the draft bill to be reviewed as a tentative proposal.

Commissioner Adelman recommended consulting with OSHPD in developing the draft language.

ACTION: Commissioner Gates made a motion, seconded by Commissioner Patwardhan, that:

The Commission consider sponsoring a bill regarding placarding of collapse-prone hospital buildings and direct the staff to attempt to find an author; and, if an author is found, to authorize the Legislative Advisory Committee and staff to draft a proposed bill for Commission consideration at the February 14, 2002, meeting.

* Motion carried, 6 - 0 - 3 (Commissioners Adelman, Nishinaga, and Shapiro abstaining).

Mr. Sepulveda recommended the Commission sponsor a bill to fund USAR equipment and training needs. He noted these costs are not appropriate for bond funding, so a separate bill would be needed for this appropriation. Mr. Sepulveda reported that Senator Alarcon is willing to include this funding in his bills provided the Governor's Office supports the concept. He added that the Commission staff will approach the Governor's Office before proceeding any further.

ACTION: Commissioner Shapiro made a motion, seconded by Commissioner Church, that:

The Commission authorize the staff to proceed as proposed.

Commissioner Patwardhan commented that the Department of Conservation has expressed an interest in USAR programs.

* Motion carried, 8 - 0 (Commissioner Klein absent during voting).

Mr. Sepulveda encouraged commissioners to contact the staff to schedule meetings with individual legislators and the Governor's Office.

Commissioner Patwardhan asked about the likelihood of new bills regarding SB 1953 and hospital seismic safety. Mr. Sepulveda said Senator Speier is likely to wait until a new speaker is appointed before deciding how to proceed with SB 842. He noted one bill regarding Alameda County hospitals was signed during the last legislative session, but the others are sill pending. He promised to keep the Commission informed as developments occur.

VII. DIVISION OF THE STATE ARCHITECT (DSA)

State Architect Stephan Castellanos reported to the Commission on the activities of the Division of the State Architect (DSA) since his appointment two years ago. He praised DSA's dedicated and professional staff and noted considerable progress has been made as a result of rethinking DSA's role and reorganizing its operations. Mr. Castellanos explained that the goal of DSA is to ensure the safety of schools and public buildings in California. By incorporating excellence principles into design and construction, DSA helps assure the best possible long-term performance for the public funds being invested.

Mr. Castellanos noted DSA developed a strategic plan to define its vision and goals, and he distributed a concise summary of the strategic plan document. He noted DSA is focusing on six major goals: customer/stakeholder satisfaction; improved internal systems and processes; high-performance staff; expanded access program; excellence in public schools and state buildings; and legislation and code development activities, including research.

Mr. Castellanos discussed DSA's Excellence in Public Buildings Initiative in more detail. He noted the purpose of the excellence program is to improve quality, safety, productivity, and reliability of public buildings to ensure prudent investment of public funds, to encourage best practices, to promote efficient use of energy and sustainability, to educate client agencies and stakeholders, to meet local community needs, to promote commissioning, and to recognize success with awards. Mr. Castellanos said the overall result of the excellence initiative will be better building performance and improved safety. He added that DSA looks forward to collaborating with the Seismic Safety Commission on joint projects.

Mr. Dennis Bellet, Chief Structural Engineer, provided an update on the activities in the DSA regional offices. He noted DSA's workload has increased 50 percent since a few years ago, and 23 percent in the most recent year. In response to this demand, DSA has been relying increasingly on outside contractors to assist the staff with plan review functions. Mr. Bellet said DSA created a list of plan submittal requirements, and this information will soon be available on the Web page. DSA is in the process of creating a unit to streamline and expedite the plan review process for relocatable classroom buildings.

In the area of education and training, Mr. Bellet reported that DSA has become more active in inspector seminars and training, with over 800 inspector participants last year. He noted DSA now has 966 approved inspectors, up 20 percent from last year. DSA is also developing an

assistant inspector program for people who work with approved inspectors. In an effort to improve consistency and uniformity, Mr. Bellet said, DSA has been working to develop standardized policies and procedures. Creation of a flow chart and electronic tracking system have been important parts of this effort.

Mr. Bellet said DSA regional office staff is also involved in SB 1469 implementation. He explained that SB 1469 requires school districts to bring HUD relocatable buildings up to current codes for anchoring, bracing, access, and fire and life safety. School districts have until December, 2002, to obtain approval and get their units reinspected, and all non-complying units must be removed from service by September 30, 2007. Mr. Bellet noted that about 8,500 of the state's 9,500 public school districts submitted reports, a good response.

Mr. Bellet thanked the Seismic Safety Commission for sponsoring AB 300, the bill requiring an inventory of pre-1976 non-wood-frame school buildings. He estimated there are about 10,000 of these buildings in California, 70 percent of which are located in Seismic Zone 4. Mr. Bellet said DSA's first draft report is awaiting internal review and approval. He noted the report addresses buildings by types of structures, geographic locations, and shaking intensity and identifies those needing additional study.

Mr. McCarthy observed there have been bills each year for the past several years directed at modifying the Field Act or creating exemptions. Although the first bills on this topic were killed in committee hearings, some are now making it out of committee, and one was vetoed by the governor last year. Mr. McCarthy noted the budget crisis this year is likely to produce more debate on the Field Act. He asked whether DSA is taking steps to speed up the plan review and permit process to combat criticism in this area. Mr. Castellanos acknowledged that the issue of timeliness was identified in DSA focus groups as well. He emphasized that a more critical issue appears to be the lack of certainty regarding expected timeframes. In response to this problem, DSA has developed intake standards and instituted a number of improvements to provide greater certainty, and it is now possible to give more definite time estimates.

Commissioner Patwardhan thanked Mr. Castellanos and Mr. Bellet for their presentations and commended DSA for its strategic plan. He observed that DSA is in a unique position to set an example and influence others. Commissioner Patwardhan said he has heard criticism that DSA projects can take as long as ten years, and he asked how that timeframe can be shortened. Mr. Castellanos said the strategic plan and excellence initiative identify DSA's next steps, but change is a slow process. He emphasized the need to ensure continuity and sustainability of DSA's programs over a long term. Mr. Castellanos noted DSA has recast the former Field Act Advisory Board as a DSA Advisory Board, and that group will provide input and direction over time.

Commissioner Patwardhan asked about DSA's progress toward "smart" buildings. Mr. Castellanos responded that as part of the excellence initiative, DSA will be collecting data on building performance, conducting research on performance issues, applying these lessons, using new technology, and working to improve energy efficiency and sustainability.

Commissioner Moy expressed his appreciation to the DSA representatives for their presentations,

and he commended DSA on the efforts to reduce turnaround time for plan review and permit approval.

Commissioner Shapiro commented that although the Field Act works, some people have a perception that compliance with the Field Act results in extra costs and delays. He urged DSA not to sacrifice Field Act quality or undermine the independent inspection process. Mr. Castellanos confirmed that DSA's intention is to achieve more consistency and uniformity in the process. He said DSA will be focusing effort on staff training, providing leadership, and incorporating excellence principles. Mr. Castellanos thanked and credited the DSA staff for making California schools the safest in the country. Instead of undermining the Field Act, he noted, DSA is working to realize greater efficiencies in terms of consistency, sharing data, and communications with stakeholders. Mr. Castellanos added that DSA also plans to take the lead in setting standards and policies; he noted DSA will provide a consultative and supportive role, not just enforcement.

Commissioner Shapiro emphasized that the Field Act has demonstrated 70 years of success, a remarkable record. He noted DSA's support and advocacy is needed more now than ever, and he welcomed DSA's cooperation in working to maintain the Field Act.

Chairman Clark asked about DSA's involvement in design-build projects. Mr. Castellanos noted a bill was signed last year requiring DSA to work with the Department of Education to develop guidelines and criteria for design-build projects. He said DSA recognizes concerns about oversight and quality assurance, and DSA is committed to maintaining current Field Act standards as a baseline, with design-build treated as an additional delivery method within that framework.

Chairman Clark thanked Mr. Castellanos and Mr. Bellet and said the Commission looks forward to future cooperation with DSA.

VIII. UPDATE ON THE SEISMIC HAZARD MAPPING PROGRAM

Mr. Charles Real, California Division of Mines and Geology (CDMG), reported to the Commission on the status of the seismic hazard mapping program. He noted damage from ground-shaking continues to be a major risk from earthquakes, and the 1997 Uniform Building Code and 2000 International Building Code recognize this threat by incorporated near-source zones. Mr. Real said the Alquist-Priolo Earthquake Fault Zoning Act led to the creation of zones based on ground failure, including landslides and liquefaction. CDMG's mapping program combines various sources of information and state-of-the-art technology to provide maps that can be used to guide land use planning and help mitigate construction problems in high-risk zones.

Mr. Real noted the mapping program was established through the Seismic Hazards Mapping Act of 1990. The goal of the program is to reduce loss of life and property damage from earthquakes, landslides, and other geologic hazards. Mr. Real observed that ground failure is clearly a coastal problem in California, but most of the state's high-density populations occur in urban coastal areas. Because of limited resources, it was necessary for CDMG to establish mapping priorities

so the areas with greatest need could be addressed first. Mr. Real said most of CDMG's efforts so far have been focused on southern California. He noted funding for the mapping program comes from building permit fees and the federal government.

Mr. Real showed sample seismic hazard maps. He said CDMG worked with USGS to incorporate site conditions in existing maps, and updated versions will be published on the USGS Web site soon. He discussed how science and technology developed by USGS, NASA, Department of Defense, the PEER Center, and other agencies is being used to produce high-resolution maps.

Mr. Real noted outreach is a key component of the seismic hazard mapping program, and CDMG accomplishes this through publications, seminars, and other activities. He said the Implementation Committee worked with the Southern California Earthquake Center (SCEC) to sponsor two workshops.

Mr. Real noted the future of the seismic hazard mapping program hinges on the amount of funding available. Although revenues have increased over the past ten years because of the recent construction boom, half of the funding expires in July of 2003, which will necessitate reducing the staff by more than 50 percent and slowing the pace of map production. Mr. Real estimated that at this rate, it will take twenty years to complete all high-priority areas. He said about 38 percent of the task will be finished by July of 2003, including most of southern California and some of the San Francisco Bay Area.

Mr. Real said CDMG hopes the seismic hazard maps will be useful in planning school sites and land use. He noted 145 new schools are being planned for Los Angeles in the next few years. Mr. Real identified ways the Commission can help: he recommended working with Senator Speier to develop a sound mechanism to prioritize expenditures of SB 717 bond money; communicating the need for the seismic mapping program to the Governor's Office, Legislature, and local officials; and helping to activate other support groups, such as the California Council of Geosciences Organizations and the Western States Seismic Policy* Council.

Commissioner Patwardhan expressed his concern about the extended timeline and funding needs, and he recommended that the Commission help as much as possible. Commissioner Patwardhan asked if CDMG had encountered much resistance from local jurisdictions regarding the maps. Mr. Real reported that only a couple jurisdictions were concerned because of the disclosure implications, but the maps were generally well received. In fact, he noted, the maps help strengthen and sustain seismic safety efforts. Commissioner Patwardhan said he was surprised developers were not more resistant. He added the outreach seminars for architects and engineers were a good idea.

Commissioner Patwardhan asked if CDMG could prepare quick interim maps pending production of detailed maps in the future. Mr. Real said CDMG issued unofficial maps after the Northridge earthquake. Although that idea is being considered, CDMG fears the maps will be challenged if they are not official. Mr. Real added that the maps will be used as a basis for important economic decisions, so their accuracy is critical. He also recognized that something

needs to be done even if the funding stream is curtailed.

Commissioner Moy asked why there was such a disparity between northern and southern California in terms of the progress in mapping. Mr. Real said southern California was the initial focus because some of the federal funding was a result of the Northridge earthquake.

Mr. McCarthy asked if CDMG had submitted a budget change proposal requesting more state funding. Mr. Real said CDMG submits a BCP annually, but it has been consistently denied.

Chairman Clark observed that the new seismic hazard maps are tremendously valuable decision-making tools that will have major impacts on the public. He said he was encouraged with the level of acceptance, and he commended CDMG for its commitment to pursuing this worthwhile activity.

IX. REVIEW OF GAS SAFETY COMMITTEE REPORT

Commissioner Moy reported the Commission's Ad Hoc Committee on Gas Valve Seismic Safety was nearing the end of its year-long study on gas shutoff valves. He said a draft report was finalized at the December 4, 2001, committee meeting, and the final version of the report will be ready in February or March.

Commissioner Moy commented that the committee's consensus-building process was slow and difficult because of the divergent views of its members, but the report reflects the committee's charge of educating and providing information on this issue, not making a recommendation or proposing legislation. Senior Structural Engineer Fred Turner added that the committee also worked with OES, DSA, and the PUC.

Commissioner Moy introduced Mr. Doug Honegger, consultant and meeting facilitator. Mr. Honegger noted the committee began its work be establishing a charter defining its goal of providing information on the role of gas in post-earthquake fires and to look at available shutoff valve technologies. The committee recognized the task of setting standards for specific devices was up to other agencies. Instead, the committee directed its attention to the cost benefits for individuals and communities.

Mr. Honegger noted the committee concluded the risk of post-earthquake fires to homeowners is very low. The cost benefits for individuals depend largely on perceived risk and affluence. For communities, there are larger public safety concerns that need to be addressed, and the report provides guidance on mechanisms to address risks and establishing risk reduction goals. Mr. Honegger added that the highest risk of post-earthquake fires occurs in dense population centers within Seismic Zone 4, where many other factors impede response.

Mr. Honegger reviewed the five recommendations made in the ad hoc committee's report: that the Commission update its "Homeowner's Guide to Earthquake Safety" (HOG) and "Commercial Building Owner's Guide to Earthquake Safety" (COG) and develop a new guidebook for multi-unit residential structures; that DSA continue developing certification

programs and enhance its enforcement; that the State Fire Marshal work to inform local jurisdictions of the risks from older, vulnerable, high-occupancy structures; that the PUC continue its regulatory oversight; and that OES inform the public of the risks. Commissioner Moy noted the recommendations are discussed in more detail in the draft report. He welcomed comments and suggestions from commissioners.

Commissioner Klein suggested delivering a clearer and more succinct message that gas shutoff valves can reduce risk, but post-earthquake gas fires constitute a very small fraction of all household fires. Mr. Honegger referred to Page 44 and added it is not clear individuals have a realistic understanding of their risks.

Commissioner Nishinaga asked about the source of the figures cited in the report. Mr. Honegger said the statistics come from the National Fire Protection Association. Commissioner Nishinaga observed that installation of gas shut-off valves may actually be counterproductive.

Commissioner Adelman noted the City of Los Angeles changed its ordinance to mandate installation of gas shut-off valves prior to the close of escrow on property sales rather than within 12 months. He said former Commissioner Hal Bernson has been a champion of the ordinance, but it involves an additional cost for individuals. He added there are approximately 20,000 sales transactions annually within the City of Los Angeles.

Commissioner Adelman asked if the NFPA statistics on fires apply to seismically active areas. Mr. Hannegger said the figures assume high seismicity. He noted the numbers are based on FEMA's post-earthquake modeling information and include fires from all causes. He observed that natural gas fires represent about 20 to 50 percent of all fires.

Commissioner Adelman expressed an interest in obtaining more information comparing the costs and benefits of excess flow valves versus seismic valves. He noted excess flow valves typically cost \$150 to \$250, while seismic valves cost \$300 to \$500. Mr. Honegger said the benefits and drawbacks of the two types was a subject of contention within the committee. He explained that excess flow valves respond to damage that causes increased flow, but small leaks may not trigger a response. Seismic valves, on the other hand, are activated by motion, regardless of damage; a key problem with this type of valve is restoring service after shutoff. Mr. Honegger questioned whether mandating this kind of expenditure is a prudent way to spend community money. He noted the checklist on Page 39 identifies other strategies to reduce risk.

Commissioner Klein expressed his opinion that installation of gas shutoff valves does not significantly reduce the risk of gas fires after earthquakes.

Commissioner Nishinaga commended the committee for its thorough report. He noted the information is very helpful.

Commissioner Moy asked Mr. Turner to discuss the next steps for the Seismic Safety Commission. Mr. Turner said the ad hoc committee is still balloting on a few outstanding issues, but the report will be finalized as soon as those are resolved. He noted developing a concise

recommendation for homeowners is another important task, and he drew attention to the third paragraph of the proposed insert, entitled "What Can Be Done." Mr. Turner added that the HOG already has a section on nonstructural bracing and securing.

Mr. Honegger said the ad hoc committee will present its full report to the Seismic Safety Commission along with a recommended insert for the HOG. Chairman Clark proposed that the Commission review and accept the committee's report at the February meeting. He thanked the ad hoc committee for its work.

Mr. Turner asked commissioners to submit proposed changes and edits by January 29. Mr. McCarthy suggested preparing a second draft for the Commission's consideration at the February meeting. Commissioner Patwardhan suggested holding a public hearing, as was done with the Commission's SB 1953 report, before releasing an official Commission publication on this issue. After some discussion, commissioners agreed to accept the ad hoc committee's report at the February meeting, invite comments, and then consider making an official recommendation.

Mr. Turner recommended revising the earthquake response section in the phone book to convey a simple, consistent, and clear message. He noted the PUC and members of the utility working group have agreed to participate in this process, and he welcomed guidance from the Commission.

Chairman Clark asked the staff to invite interested parties to attend the February meeting and to work with others to develop a common message.

Chairman Clark thanked Commissioner Moy, the members of the ad hoc committee, and the staff for their work on this topic.

X. MISCELLANEOUS

Chairman Clark noted the materials under Tab G of the meeting packet had been covered earlier.

XI. GOOD OF THE MEETING

There were no other items brought to the Commission's attention.

XIV. ADJOURNMENT

There being no further business, Commissioner Shapiro made a motion, seconded by Commissioner Nishinaga, that the meeting be adjourned. The meeting was adjourned at 1:35 p.m.

Karen Cogan	
Executive Assistant	

Approved by:

Richard McCarthy Executive Director